



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/019,977	02/15/2002	Tetsujiro Kondo	450119-03017	9265

7590 12/27/2004

William S Frommer
Frommer Lawrence & Haug
745 Fifth Avenue
New York, NY 10151

EXAMINER

KOSTAK, VICTOR R

ART UNIT	PAPER NUMBER
----------	--------------

2614

DATE MAILED: 12/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/019,977	Applicant(s) KONDO ET AL.	
	Examiner Victor R. Kostak	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-29 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-9, 11-13, 15, 17, 19, 30, 31, 36, 37 and 40 is/are rejected.
- 7) ☒ Claim(s) 4, 10, 14, 16, 18, 32-35, 38, 39 and 41-44 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>07/30/02</u> . | 6) <input type="checkbox"/> Other: ____. |

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. Note MPEP 606.01.
2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the up and down resolution keys (claim 5) and the knob used for resolution selection (claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified

Art Unit: 2614

and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Or (c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 7-9, 11-13, 15, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Donovan.

The system of Donovan (noting particularly Fig. 15 and the multitude of tables and appendices) involves converting a first signal into a second signal, including selecting from the first signal plural pixels (comprising adjacent lines) adjacent to the pixel of the second format to be generated (e.g. Fig. 13) done by element 202 through element 208; class detection means reads on convertor 206 which identifies (and subsequently) manipulates the input parameters and the output parameters, since it determines the output format from the values of respective selected input lines (e.g. which type of VGA), and which parameters describe what can be defined as respective classes; resolution selection also being performed by convertor 206 identified by the standard resolution of the NTSC or PAL output format so determined by parameter table 204; and pixel generation means internal to element 206 which generates the

Art Unit: 2614

output pixel data based on the detected class and selected resolution, thereby meeting claims 1 and 8.

As for claims 7, 11 and 12, the converted video signal characterized by its resolution (as well as by other parameters) is ultimately display on the TV shown in Fig. 13.

As for claims 2 and 13, coefficient data is generated by element 206 according to the class and resolution selected (essentially by the entirety of the parameters necessary for generating the output format values from the input format values); the coefficients being generated according to equations (listed in cols. 11-14) used to derive or estimate the calculated output values used for the converted signal. The coefficients are stored in various tables (e.g. those listed in cols. 10, 16-18) and generated previously according to every combination of input and output formats so identified by the resolutions and classes (e.g. col. 9 lines 50-67; col. 10 lines 15-30 and lines 54 –67 through col. 11 line 10). The equations used for estimating the output values accordingly use coefficients selected per respective desired formats to generate the output parameter values.

Regarding claim 3, coefficient data pertaining to input parameters are read out from first storage and then stored for subsequent conversion operations according to the class of output data (e.g. Figs. 13 and 14).

As for claims 7 and 15, the TV unit shown (not numerically labeled) can display an NTSC or PAL signal, each having different respective resolutions.

Considering claims 17 and 19, element 204 can be considered as providing the instructive (instruction) signal used to instruct the convertor 206 what equation values to use; and the

Art Unit: 2614

equations used to convert the input to the output format can be considered normal (since it carries out the operations involving ratios that applicant recites).

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Donovan.

Regarding claim 5, although Donovan does not specify the user interface devices used to select the input and output formats, including deciding to present an NTSC or PAL format (the NTSC having lower resolution than the PAL format), it would nonetheless have been obvious to use any suitable means such as a button, key, slide or knob mechanism as a means available to the user to tangibly make the selection, thereby meeting claim 5 and 6.

6. Claims 30, 31, 36, 37 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaizaki et al.

The receiver of Kaizaki (noting Fig. 1) converts a first image signal comprised of plural pixels into a second image signal also comprising plural pixel data, wherein first data is selected from the input signals (and applied to convertor 4) adjacent to a subject signal (the subject signal being a pixel related in position to the first signal and resulting from the conversion thereof, for the plural respective pixels of the second signal); class detection corresponds to the signal defined by its format, in this case either of 16:9 or 4:3 aspect ratio formats, the subject pixels

Art Unit: 2614

being a function of the input signal; input information section (switch selection 9) for identifying that the display device is used in identifying 16:9 mode or a 4:3 mode for display; image quality selection based on the display mode so identified; and pixel generation (element 5) responsive to the selected display device mode ID for generating pixel data for the output format based on the class and quality information, thereby meeting claims 30 and 36.

As for claim 31, a memory 11a and 11b are used to correlate quality with device ID modes.

As for claim 37, the prior art arrangement shown in Fig. 6 involves coefficient generation as a function of the output format and the input format using the equations shown in Fig. 9.

Regarding claim 40, the display device encompasses the components contained in the outline, and the conversion process involves selecting the input signal for conversion processing according to selection of the device display format, wherein memory 11a or 11b is selected for the conversion process to provide the appropriate output image quality.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant is informed that Nakamoto is also particularly relevant to claims 1-3, 7-9, 11-13, 15, 17 and 19 as he also discloses conversion of an input video signal of any of plural formats and resolutions into an output signal of a selectable format (NTSC or PAL) by determining coefficients based on the output format and input formats (in a manner involving a subject pixel of the output format relative to pixels of the first format adjacent thereto), wherein

Art Unit: 2614

detection of the class of the subject pixel is done since the signal of the input format is a known category or class of VGA to be converted into TV.

Applicant is also apprised of Johary, who can be applied against several of claims 30, 31, 36, 37 and 40. Johary detects the type of display device based on an ID signal, and accordingly converts the input signal to accommodate the type of display (CRT or flat panel).

8. Claims 4, 10, 14, 16, 18, 20-29, 32-35, 38, 39 and 41-44 appear allowable over the prior art.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor R. Kostak whose telephone number is 703 305-4374. The examiner can normally be reached on Monday - Friday from 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703 305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2614

Any response to this action should be mailed to:

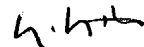
Commissioner of Patents and Trademarks
Washington, D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 308-HELP.



Victor R. Kostak
Primary Examiner
Art Unit 2614

VRK